

ABSTRACT OF THE DISCLOSURE

The method comprises the step polishing the surface of a film-to-be-polished formed over a semiconductor substrate 10 with a polishing pad while a polishing slurry containing abrasive grains, and an additive of a surfactant is being supplied onto the polishing pad 104 to thereby planarize the surface of the film-to-be-polished, and the step of further polishing the surface of the film-to-be-polished with the polishing pad while the polishing slurry and water are being supplied onto the polishing pad, after the surface of the film-to-be-polished has been planarized. In the finishing polish, not only deionized water but also the polishing slurry are supplied on to the polishing pad, a position for the polishing slurry to be supplied to and a position for the deionized water to be supplied to are suitably set, and a ratio of a supply amount of the polishing slurry and a supply amount of the deionized water is suitably set, whereby the intra-plane film thickness of the film-to-be-polished as finish-polished can be uniform.